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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,968	01/29/2004	Shih-Yang Lee	3313-1106P	2347
2292	7590	09/08/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			YAM, STEPHEN K	
			ART UNIT	PAPER NUMBER
			2878	
DATE MAILED: 09/08/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/765,968

Applicant(s)

LEE, SHIH-YANG

Examiner

Stephen Yam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 January 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities:

Element "527" in Fig. 3 is referred to as a "guiding mirror set"- however, it does not appear that the element performs any "mirror" functions. A mirror is operative to reflect light; the element 527 of Fig. 3 appears to refract/transmit light with a different angle. Therefore, it appears that the element is more suited to being labeled a "prism" instead of a "mirror". However, for initial examination purposes, Examiner will treat Applicant's "guiding mirror set" as any optical element that reflects *or* refracts light.

Appropriate correction is required.

### *Drawings*

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 40, 50, 51, 53, 60 (Page 3 of Specification). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the

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examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 222 (Page 3 of specification). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the guiding mirror set (see above objection to the specification for explanation/reasoning) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet,

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even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. It appears that Applicant intended to use reference numeral "22" instead of reference numeral "23" to indicate the body described in Fig. 2, according to Page 1, line 15 of the specification.

### *Claim Objections*

6. Claims 1 and 3 are objected to because of the following informalities:

In Claim 3, line 3, "the one side" lacks proper antecedent basis.

In Claim 1, line 8, "another side of the body" should be changed to "the another side of the body" for proper antecedent basis.

Appropriate correction is required.

*Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spears US Pre-Grant Publication No. 2004/0207886 in view of Applicant's admitted prior art (hereinafter APPA).

Regarding Claims 1 and 2, Spears teaches (see Fig. 2A, 2B) a positioning structure of a plane image input apparatus, comprising a body (201, 202), having a hollow interior (below (201)), having an outer side (side of (201) facing (200)) for holding a document (200) to be scanned, and having another side (under (201) for mounting and supporting (210)) holding a correct picture (210) therein and an optical module (202), located in the hollow interior, movable reciprocally (see Paragraph 0037), and including a correct light source (204) for emitting light and an image sensor (208) for receiving the light (see Fig. 2B), the correct light source being located on the another side of the body (see Fig. 2A), the light being reflected to the optical module (See Fig. 2B and Paragraph 0034), the guiding mirror set directing the light to the charge-coupled device for the optical module to perform color rank correction. Regarding Claim 1, Spears does not teach a correct hole located on the another side of the body for reflecting the light to the optical module, a guiding mirror set for directing the light, the image sensor as a charge-coupled device, the correcting light source emitting the light to the correct picture when the optical module is corresponding to the correct picture. Regarding Claim 2, Spears does not

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teach a masking element corresponding to the correct light source, having one end abutting the body to prevent external element from entering the optical module through the correct hole. Applicant's admitted prior art teaches (see Fig. 1-2) a plane image input apparatus having a correct hole (opening in (22)) (see Fig. 2) located on the another side of the body (inside (20)) for reflecting the light to the optical module (see Page 1, lines 17-18), a guiding mirror set (222) for directing the light, the image sensor as a charge-coupled device (see Page 1, line 16), the correcting light source emitting the light to the correct picture when the optical module is corresponding to the correct picture (see Page 1, line 24 to Page 2, line 2), with a masking element (downward extension from top surface of (23) to the left of (222)) (see Fig. 2) corresponding to the correct light source, having one end abutting the body to prevent external element from entering the optical module through the correct hole. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a correct hole, a guiding mirror set, the image sensor as a charge-coupled device, and the correcting light source emitting the light to the correct picture when the optical module is corresponding to the correct picture, with a masking element, as taught by Applicant's admitted prior art, in the device of Spears, to provide positioning calibration, extend the optical path length for improved visibility and focus, and reduce light interference to improve accuracy.

Regarding Claim 3, Spears in view of APPA teach the device of Claim 1, according to the appropriate paragraph above. Spears also teaches the optical module including a scan light source (204) located on the another side of the body to emit light to the scanned document (200), and the light entering the optical module to the image sensor to obtain image signals (see Paragraph 0037). Spears does not teach the optical module including a scan hole or a reflecting

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mirror set with the scan light entering the optical module through the scan hole to be reflected by the reflecting mirror set to the charge coupled device. Applicant's admitted prior art teaches (see Fig. 1-2) an optical module including a scan hole (opening in (22)) (see Fig. 2) and a reflecting mirror set (222), light from a scan light source entering the optical module through the scan hole to be reflected by the reflecting mirror set to the charge-coupled device (223) to obtain image signals (see Page 1, lines 17-18). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a scan hole and a reflecting mirror set with the scan light entering the optical module through the scan hole to be reflected by the reflecting mirror set to the charge coupled device, as taught by APPA, in the device of Spears, to extend the optical path length for optimal focusing and reduce light interference to improve the contrast of the scanned image.

Regarding Claims 4-7, Spears in view of APPA teach the device of Claim 1, according to the appropriate paragraph above. Spears does not teach a printed circuit board for receiving a driving signal and driving, a transmission mechanism for driving the optical module when the printed circuit board is driving, a guiding track to guide the optical module to move reciprocally, or a lid to cover the outer side of the body. Applicant's admitted prior art teaches (see Fig. 1-2) a plane image input apparatus having a printed circuit board (30) for receiving a driving signal and driving (see Page 1, lines 18-19), a transmission mechanism (21) for driving the optical module when the printed circuit board is driving (see Page 1, lines 18-20), a guiding track (23) to guide the optical module to move reciprocally (see Page 1, lines 19-20), and a lid (10) to cover the outer side of the body (see Fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the printed circuit board, transmission mechanism,



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guiding track, and lid as taught by Applicant's admitted prior art, in the device of Spears, to enable efficient and effective operation of the scanner using common, standard scanner components.

### *Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sato US Patent No. 6,515,771, teaches a scanning device with a reference image.

Chen et al. US Pre-Grant Publication No. 2003/0111587 teaches a scanning device with a calibration component.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Yam whose telephone number is (571)272-2449. The examiner can normally be reached on Monday-Friday 8:30am-5pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on (571)272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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THANH X. LUU  
PATENT EXAMINER